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**Cost-Benefit Analysis of
Iowa's Family Investment
Program:
Two-Year Results**

Executive Summary

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HOW TO GET THE FULL REPORT

For a copy of the full report on which this executive summary is based, please send a check for \$13.50 (to cover copying, shipping, and handling) made payable to Mathematica Policy Research, Inc., to:

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Refer to publication PR99-02. The report is 94 pages in length, not counting appendices. Ms. Watterworth's telephone number is (609) 275-2334.

Other reports on the evaluation of welfare reform in Iowa are also available. Mathematica's web site provides a list of those reports as well as instructions on how to obtain copies of them. The address of that site is: <http://www.mathematica-mpr.com>.

EXECUTIVE SUMMARY

On October 1, 1993, Iowa replaced the Aid to Families with Dependent Children (AFDC) program with the Family Investment Program (FIP). The program's goals for recipients are to make work "pay," to promote responsibility with consequences, and to promote family stability. Provisions to make work pay include increased earnings disregards and extended child care benefits. To promote responsibility, FIP requires recipients to develop an individualized self-sufficiency plan called a Family Investment Agreement (FIA) and either adhere to the plan or work with a case manager to modify it. Anyone who fails to develop or follow the FIA is placed in the Limited Benefit Plan (LBP), under which benefits are first reduced, then eliminated for a fixed period. The program encourages family stability by making it easier for two-parent families and stepparent families to be eligible for assistance.

The Iowa Department of Human Services (DHS) contracted with Mathematica Policy Research, Inc., (MPR) and its subcontractor, the Institute for Social and Economic Development, to conduct a comprehensive evaluation of FIP and associated reforms to Iowa's Food Stamp Program. The evaluation is based on an experimental design. A sample of cases in nine Iowa counties were randomly assigned to either a treatment group covered by welfare reform FIP and food stamp policies or to a control group covered by prereform policies. The research sample includes both ongoing cases, who were receiving FIP or food stamps when welfare reform was implemented in October 1993, and applicant cases who applied for benefits between October 1993 and April 1996. Administrative data systems maintained by the Iowa DHS provided data on program participation and benefits. Data on employment and earnings of sample members came from earnings records maintained by Iowa Workforce Development.

This report on the cost-benefit analysis is one of three reports on Iowa's welfare reform program in its first two years. Companion volumes present results from the process analysis of program implementation (Prindle et al. 1999) and the impact analysis (Fraker et al. 1998).

RESULTS IN BRIEF

We found that Iowa's welfare reform produced net benefits to society (for both ongoing and applicant samples) under a wide range of assumptions, even over the relatively short follow-up periods studied for this report. When viewed from the perspectives of specific subgroups, however, the findings were more mixed. Ongoing FIP recipients benefited only slightly from the reforms in the first two years, while applicants benefited substantially within the first year. For ongoing cases, welfare reform produced net benefits to government as a whole and the federal government but small net costs to state and local governments. For applicant cases, welfare reform produced net costs to all branches of government in the first year, largely because of an increase in Medicaid claims paid under welfare reform.

The *direction* of the results (whether there are net costs or savings) from the perspectives examined was largely insensitive to the specific assumptions we used. However, the *size* of the net costs or benefits from the various perspectives was sensitive to these assumptions. The net present

value of welfare reform from the perspective of society as a whole roughly doubled as we moved from the most pessimistic to the most optimistic assumptions. From the perspectives of social subgroups, the size of the net costs or benefits of welfare reform were sometimes even more sensitive to the assumptions used.

OVERVIEW OF THE COST-BENEFIT ANALYSIS

The cost-benefit analysis provides a framework for comparing the various benefits and costs of Iowa's welfare reform program and for determining how each is allocated. All costs and benefits were assessed relative to those that would have been incurred under the prereform program, by comparing the experiences of the treatment group to the control group. Data for ongoing cases covered the two years after the implementation of welfare reform. Data for applicant cases covered one year after the quarter these cases entered the sample. The analysis consisted of five steps:

1. Defining the stakeholders from whose perspectives the benefits and costs of welfare reform are measured
2. Listing all benefits and costs that may be affected by the reforms from each perspective
3. Developing estimates of the dollar values of each benefit or cost
4. Accounting for the passage of time by discounting and adjusting for inflation
5. Analyzing the sensitivity of the results to changes in key assumptions

The costs and benefits of welfare reform are assessed from the perspectives of welfare-reform cases, the government, noncustodial parents who may pay child support to children in these welfare-reform cases, and society as a whole. The government perspective was further divided into the perspectives of the federal government versus the state and local governments.

The analysis sought to consider the full range of costs and benefits that may have been affected by Iowa's welfare reform program and to value in monetary terms the treatment-control differences in these costs and benefits using the available data. For earnings, FIP benefits, food stamps, and Medicaid paid claims, we used the estimated dollar impacts developed as part of the evaluation's impact analysis. We then developed estimates of impacts on the taxes paid by persons in each case from these estimates.

To estimate impacts on the administrative costs of various programs, we first estimated treatment-control differences in the duration of participation and then used aggregate administrative data to estimate the unit cost of participation for a fixed period, typically a month. This approach was used to estimate the administrative costs of the FIP, food stamp, and Medicaid programs; of PROMISE JOBS (Iowa's employment training program for welfare recipients); and of the Food Stamp Employment and Training (FSET) Program. Using Iowa administrative data, we were also able to estimate directly the treatment-control differences in child support payments; child care

subsidies received through PROMISE JOBS and other programs; and subsidies for tuition, fees, and transportation for those in PROMISE JOBS.

Costs for which no data were available for the Iowa sample were estimated on the basis of data from published studies of similar populations and assumptions about how this information applied to the Iowa sample. We estimated fringe benefits as a percentage of earnings by using national data on the value of such benefits and the assumption that most welfare recipients who took jobs did not receive employer-provided health insurance. To estimate the costs of work to case members who took jobs, we approximated the impacts of the program on weeks worked and used estimates of the weekly cost of child care and transportation from other studies. We used data from other studies to estimate child care costs not covered by fees. Costs of postsecondary education not covered by PROMISE JOBS were estimated based on discussions with a small group of institutions. As all of these estimates were less certain than estimates based on Iowa data, we did extensive sensitivity testing of variations in the assumptions underlying them.

All estimates were discounted to the beginning of the follow-up period and presented in fourth quarter 1993 dollars.

BENCHMARK ASSUMPTIONS AND SENSITIVITY TESTS

Our benchmark, or “best judgment,” assumptions were that:

- Fringe benefits are 17 percent of earnings.
- Out-of-pocket child care and transportation costs each average \$20 per week worked.
- Impacts on weeks worked (used in calculating child care and transportation costs) can be approximated by assuming that both treatment and control group workers earned \$195 per week.
- Impacts of welfare reform on costs of education, training, or other services are fully captured in our analysis of impacts on PROMISE JOBS and FSET costs.

We used the point estimates of program impacts on Medicaid and child support in our benchmark estimates, but, because these estimates are less precise, we tested the sensitivity to plausible higher and lower estimates.

To test the sensitivity of the results to these assumptions, we considered the following variations:

- Fringe benefits as 25 percent of earnings
- Both higher and lower assumptions for out-of-pocket child care and transportation costs

- Both higher and lower assumptions for impacts on weeks worked
- Costs of employment training 20 percent lower or higher than benchmark estimates
- Medicaid claims capped at \$15,000 per case per quarter to reduce the effects of extreme values
- Child support impacts at the upper and lower boundaries of the 90 percent confidence interval for these estimates

We also considered the effects of combining these changes into “most optimistic” and “most pessimistic” packages of assumptions, to indicate the range of plausible variant estimates.

RESULTS FOR ONGOING FIP CASES

The benchmark estimates indicate that welfare reform for ongoing FIP cases led to a net gain for society of \$288 per case during the first two years (Table 1). The benefits from the social perspective were derived from the positive impacts of reform on the earnings plus fringe benefits of welfare cases, but more than half of these benefits were offset by increased service costs and costs of work. Welfare reform cases gained very slightly (with a net benefit of only \$55 per case over two years) as much of their earnings gains were offset by benefit reductions, increased taxes, and increased costs of work. The federal government gained substantially (\$382 per case), largely because food stamp benefits, which are completely federally funded, fell by \$221 per case. The state and local governments and noncustodial parents experienced modest net costs.

The experience of ongoing reform cases varied considerably over the two years for which data were available. In particular, ongoing cases experienced net benefits in the first year of \$139 per case (Table 2) but net losses in the second year of \$83 per case (Table 3). On the other hand, nearly all the gains from the government’s perspective occurred in the second year. This is because ongoing cases’ losses in government benefits were concentrated in the second year of reforms, probably due to the generous earnings disregards under the FIP program that reduce or delay the decline in welfare benefits as earnings increase. The decline in welfare payments in year two, when combined with higher taxes and costs of work, was so large that ongoing cases actually fared worse under welfare reform.

Sensitivity analyses indicate that the magnitude of these results changes considerably under alternative assumptions (Table 4). The most optimistic and most pessimistic sets of assumptions place plausible upper and lower boundaries on the net benefits of reform for ongoing cases. From

TABLE 1

NET COSTS AND BENEFITS OF WELFARE REFORM FOR ONGOING FIP CASES
(Dollars)

	Perspective					
	Reform Cases	Noncustodial Parents	Government			Society
			Federal	State and Local	Total	
Benefits						
Earnings plus Fringe Benefits	642	0	0	0	0	642
Taxes Paid	-99	0	72	27	99	0
FIP, Food Stamps, Medicaid and Child Support	-374	-87	370	89	459	-2
Costs						
Increased Use of Employment- Training Services	0	0	-89	-88	-177	-177
Costs of Working (Child Care and Transportation)	-114	0	29	-90	-61	-175
Net Present Value	55	-87	382	-62	320	288

NOTES: These estimates are based on the benchmark assumptions and are for the two years following implementation of welfare reform.

All estimates are discounted and inflation-adjusted to the fourth quarter of 1993. Because figures are rounded, some rows or columns may not total precisely.

TABLE 2

NET COSTS AND BENEFITS OF WELFARE REFORM FOR ONGOING FIP CASES: YEAR 1
(Dollars)

	Perspective					
	Reform Cases	Noncustodial Parents	Government			Society
			Federal	State and Local	Total	
Benefits						
Earnings plus Fringe Benefits	239	0	0	0	0	239
Taxes Paid	-36	0	28	8	36	0
FIP, Food Stamps, Medicaid and Child Support	-22	-43	81	-16	64	-1
Costs						
Increased Use of Employment- Training Services	0	0	-40	-40	-80	-80
Costs of Working (Child Care and Transportation)	-42	0	11	-40	-29	-71
Net Present Value	139	-43	78	-87	-9	87

NOTES: These estimates are based on the benchmark assumptions and are for the first years following implementation of welfare reform.

All estimates are discounted and inflation-adjusted to the fourth quarter of 1993. Because figures are rounded, some rows or columns may not total precisely.

TABLE 3

NET COSTS AND BENEFITS OF WELFARE REFORM FOR ONGOING FIP CASES: YEAR 2
(Dollars)

	Perspective					
	Reform Cases	Noncustodial Parents	Government			Society
			Federal	State and Local	Total	
Benefits						
Earnings plus Fringe Benefits	404	0	0	0	0	404
Taxes Paid	-63	0	44	19	63	0
FIP, Food Stamps, Medicaid and Child Support	-352	-44	290	104	394	-2
Costs						
Increased Use of Employment- Training Services	0	0	-49	-48	-97	-97
Costs of Working (Child Care and Transportation)	-72	0	18	-50	-32	-104
Net Present Value	-83	-44	303	245	328	201

NOTES: These estimates are based on the benchmark assumptions and are for the second year following implementation of welfare reform.

All estimates are discounted and inflation-adjusted to the fourth quarter of 1993. Because figures are rounded, some rows or columns may not total precisely.

TABLE 4
 SENSITIVITY OF RESULTS FOR ONGOING FIP CASES
 TO ALTERNATIVE ASSUMPTIONS
 (Net Benefit in Dollars)

	Perspective					
	Reform Cases	Noncustodial Parents	Government			Society
			Federal	State and Local	Total	
Benchmark Assumptions	55	-87	382	-62	320	288
Most Optimistic Assumptions	238	-239	446	-17	429	428
Most Pessimistic Assumptions	-49	67	305	-113	192	210

NOTES: These estimates are for the two years following implementation of welfare reform.

The “most optimistic” assumptions include the following: a cap on Medicaid claims of \$15,000 per case per quarter, 25 percent fringe rate, the high estimate of child support, education and training costs 20 percent below benchmark, and out-of-pocket costs of work half the benchmark level. The “most pessimistic” assumptions include the following: low estimate of child support, an increase of 20 percent in education and training costs, and an increase in costs of work based on an assumed larger impact on weeks worked.

the larger social perspective, the estimates ranged from \$210 per case to \$428 per case. From the welfare case perspective, the estimates changed dramatically--from a net cost of \$49 per case to a net benefit of \$238 per case. The substantial federal savings varied from \$305 to \$446; the state's modest costs varied from \$113 per case to \$17 per case.

RESULTS FOR APPLICANT FIP CASES

From both the social perspective and the perspective of the case members themselves, the net benefits of welfare reform were much greater for applicant cases than for ongoing cases due to larger earnings impacts for these cases (Table 5). The net social gain from welfare reform for applicant cases was \$528 per case in the year after application. This is nearly six times the gain achieved for ongoing cases in the first year and nearly twice what ongoing cases gained over two years. Still more striking was the estimated net benefit from the perspective of the applicant case members themselves: \$960 per case. This reflected both earnings gains and a large increase in Medicaid claims, which was only partly offset by increased taxes and costs of work. However, there were net costs during the first year for all branches of government of \$462 per case, again largely due to the increase in Medicaid claims paid.

In general, the results for applicant cases are less sensitive to changes in assumptions than the results for ongoing cases, since the earnings impacts for applicants (which were measured with relative precision) were large relative to other costs and benefits (Table 6). Still, the impacts from the social perspective range from \$447 per case under the "most pessimistic" assumptions to \$678 per case under the "most optimistic" assumptions. The impacts on applicants to FIP range from \$763 per case to \$1,135 per case.

CONCLUSIONS

Over the short follow-up periods covered in this report, welfare reform in Iowa increased the employment and earnings of ongoing and applicant cases at a relatively low additional service cost. In addition, after two years the reform program's impact on ongoing cases produced savings for the government, which is somewhat surprising for a program that allows participants who take jobs to stay on assistance longer. Although the program produced net costs to the government for applicant cases, almost all of these were Medicaid costs. From the case members' perspective, welfare reform led to very small net gains for ongoing cases but large benefits for applicant cases.

The earnings gains made by ongoing FIP recipients in the first two years of welfare reform were modest and were largely offset by increased taxes, losses in welfare benefits, and increased costs of work. This suggests how difficult it is for many FIP recipients to achieve self-sufficiency.

The results might change over a longer follow-up period. If the major effect of the program is to move clients into employment more quickly, earnings impacts may decline or level off over time. On the other hand, more work experience and increased access to job training under welfare reform may lead to earnings effects that grow over time.

TABLE 5
NET COSTS AND BENEFITS OF WELFARE REFORM FOR
APPLICANT FIP CASES
(Dollars)

	Perspective					
	Reform Cases	Noncustodial Parents	Government			Society
			Federal	State and Local	Total	
Benefits						
Earnings plus Fringe Benefits	801	0	0	0	0	801
Taxes Paid	-116	0	83	33	116	0
FIP, Food Stamps, Medicaid, and Child Support	415	30	-263	-190	-453	-8
Costs						
Increased Use of Employment- Training Services	0	0	-61	-57	-117	-117
Costs of Working (Child Care and Transportation)	-140	0	11	-19	-8	-148
Net Present Value	960	30	-229	-233	-462	528

NOTES: Estimates are based on the benchmark assumptions and cover the year after the quarter of application.

All estimates are discounted and inflation-adjusted to the fourth quarter of 1993. Because figures are rounded, some rows or columns may not total precisely.

TABLE 6

SENSITIVITY OF RESULTS FOR APPLICANT FIP
CASES TO ALTERNATIVE ASSUMPTIONS
(Net Benefits in Dollars)

	Perspective					
	Reform Cases	Noncustodial Parents	Government			Society
			Federal	State and Local	Total	
Benchmark Assumptions	960	30	-229	-233	-462	528
Most Optimistic Assumptions	1,135	-61	-190	-206	-396	678
Most Pessimistic Assumptions	763	120	-210	-226	-436	447

NOTES: Estimates cover the year after the quarter of application.

The “most optimistic” assumptions include: 25 percent fringe rate, high estimate of child support, education and training costs 20 percent below benchmark, and out-of-pocket costs of work half the benchmark level. The “most pessimistic” assumptions include: a cap on Medicaid claims of \$15,000 per case per quarter, low estimate of child support, an increase of 20 percent in education and training costs, and an increase in costs of work based on an assumed larger impact on weeks worked. Note the Medicaid cap is included in the “pessimistic” group for applicant cases, because it reduces benefits to welfare cases.